

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

APPLICATION N	О.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/784,327		02/23/2004		Michael N. Burdenko	8565-AFP/GDM	8723	
20349	7590	07/26/2005			EXAMINER		
POLAR	OID CO	RPORATION	TRAN, HUAN HUU				
PATENT	DEPART				ART UNIT	PAPER NUMBER	
WALTH				2861			
•					DATE MAILED: 07/26/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

				<i>B</i> V						
	Application	No.	Applicant(s)	711						
	10/784,327		BURDENKO, MICHAEL N.							
Office Action Summary	Examiner		Art Unit							
	Huan H. Tra		2861							
The MAILING DATE of this communication a Period for Reply	ppears on the o	over sheet with the c	orrespondence add	dress						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).										
Status										
1) Responsive to communication(s) filed on	,									
,	nis action is no	n-final.								
Disposition of Claims										
4) ⊠ Claim(s) 1-34 is/are pending in the application 4a) Of the above claim(s) is/are withdress 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-7 and 17-23 is/are rejected. 7) ⊠ Claim(s) 8-16 and 23-32 is/are objected to. 8) □ Claim(s) are subject to restriction and	rawn from con									
Application Papers										
9) The specification is objected to by the Exami 10) The drawing(s) filed on 23 February 2004 is/ Applicant may not request that any objection to the Replacement drawing sheet(s) including the corr 11) The oath or declaration is objected to by the	are: a)⊠ acce he drawing(s) be rection is require	held in abeyance. Se	e 37 CFR 1.85(a). jected to. See 37 CF	FR 1.121(d).						
Priority under 35 U.S.C. § 119			•							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>										
Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date 8/23/04.	00)	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	ate	D-152)						

#### **DETAILED ACTION**

## Claim Objections

1. Claims 31-32 are objected to because of the following informalities: The preamble of the claims are directed to a thermal printer, whereas the base claim is directed to a thermal platen. Appropriate correction is required.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claimd 1, 17 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yabuki et al (JP 56-157389).

As to claim 1, Yabuki et al discloses, with reference to Fig. 4 in particular, a thermal print head platen (4) comprising a pair of support members (9) separated by a gap (8), wherein said support members are adapted to be oriented to press print media (5) against a thermal print head (1) for printing purposes with said gap approximately aligned with a heating element (3) located within said print head.

As to claim 17, Yabuki et al discloses a thermal printer comprising a thermal print head (1) arranged in operative relationship with a thermal print head platen (4) as defined in Claim 1, said thermal print head platen adapted to pressure print media against said thermal print head for printing purposes.

Application/Control Number: 10/784,327 Page 3

Art Unit: 2861

## Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2, 3, 4, 5, 6, 7, 18, 19, 20, 21, 22, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yabuki et al in view of Inoue (JP 58-014786 cited in the IDS filed on 08/23/04).

Yabuki et al discloses essentially the claimed invention except that it does not clearly show the limitation "wherein said print head includes a convex surface relative to said support members for printing purposes and said heating element is located approximately at an apex of said convex surface relative to said support members for printing purposes" (claims 2, 18, 19, 20) and "the thermal printhead having a linear array of heating elements for printing purposes" (claims 3, 19, 20).

As to claims 5 and 6, Yabuki et al shows the limitation "wherein said platen is adapted to provide an overall convex path for print media relative to the thermal print head for printing purposes." (claims 5, 21), and the limitation "wherein said platen has an elongated overall convex surface including a convex cross sectional shape adapted for providing said overall convex print media path" (claims 6, 22)

As to claims 7 and 23, Yabuki et al shows that the platen support members 9 extend from the overall cross sectional surface of the platen 4.

Inoue shows that such printhead is conventional in the art. See Figs. 1 and 3 which show a thermal head having an elongated convex surface in parallel relation to a linear array of heating element, with the linear array of heating elements located approximately at an apex of said elongated convex surface (claims 1 and 4).

It would have been obvious to one of ordinary skill in the art to use the printhead as taught by Inoue in Yabuki et al so that the heating element presses closely against the printing medium.

6. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yabuki et al in view of Inoue as applied to claim 17 above, and further in view of Kobayashi et al (US Patent 4725853 cited in the IDS filed on 08/23/04)

Yabuki et al in view of Inoue discloses the claimed invention except that it does not show that the platen is stationary and the printhead is biased against the thermal platen.

Kobayashi et al shows that such feature is conventional in the art. See Fig. 6 which show a head 1 being biased against a platen 62.

It would have been obvious to one in the art to modify the teaching of Yabuki et al modified by Inoue with the teaching of Kobayashi et al as a way to bring the head into contact with the platen.

7. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yabuki et al in view of Inoue as applied to claim 17 above, and further in view of Schafter et al (US Patent 4327366 cited in the IDS filed on 08/23/04).

Yabuki et al in view of Inoue discloses the claimed invention except that it does not show that the print head is stationary and the platen is biased against the thermal printhead.

Schafter et al shows that such feature is conventional in the art. See Fig. 2 and Col. 3, lines 5-7.

It would have been obvious to one in the art to modify the teaching of Yabuki et al modified by Inoue with the teaching of Schafter et al as a way to bring the head into contact with the platen.

## Allowable Subject Matter

- 8. Claims 8-11, 12, 13-16, 24-27, 28, 29, 30, 31-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 9. The following is a statement of reasons for the indication of allowable subject matter: As to claims 8, 12, 24, 28 and dependent claims thereof, prior art do not teach or suggest the limitation relating to the frame.

As to claims 13, 29, 30, and dependent claims thereof, prior art do not teach or suggest the claimed member.

Art Unit: 2861

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huan H. Tran whose telephone number is (571) 272-2261. The examiner can normally be reached on at work on W-F from 6:30 to 5; T are telework days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Talbott can be reached on (571) 272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

· · · · / · /

Huan H. Tran

Primary Examiner

Art Unit 2861

hht 07/22/05